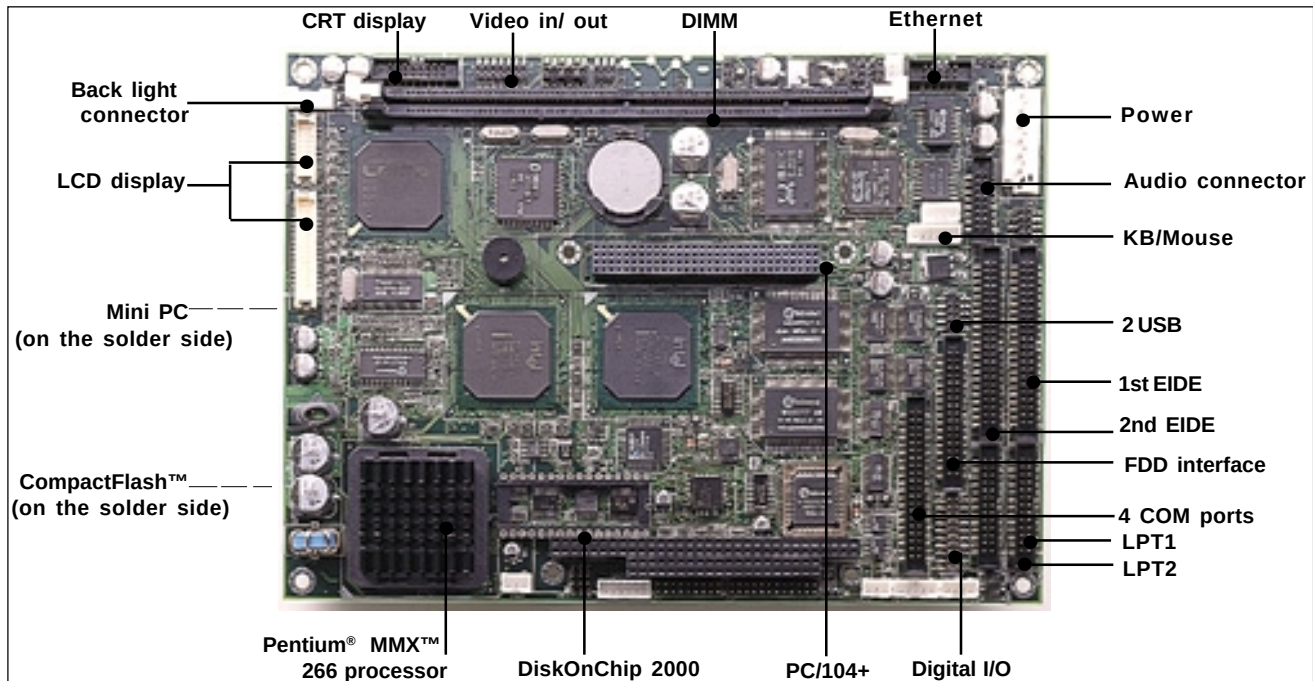


PCM-9550F/M *EBX Pentium® SBC with CPU, Video, Audio, VGA/LCD, and Ethernet*



Introduction

Advantech's new PCM-9550F/9550FM operates without a fan at low power, typically 3 amperes at 5 volts, supports numerous peripherals, and is an excellent core technology for medical equipment and POS systems, with a long product life cycle. It is a EBX Biscuit PC single board computer (SBC) with an onboard Intel low power Pentium® MMX™ 266 MHz processor, video input/output (PCM-9550FM), a VGA/LCD controller, a PCI audio interface, a PCI Ethernet interface, and 8 digital inputs and outputs. Its design is based on the EBX form factor that supports the PC/104-Plus interface for ISA/PCI module upgrade. Other on-board features include a 512KB 2nd level cache, 2 LPT, 2 USB, Fast IrDA and 4 serial ports: 3 RS-232 and 1 RS-232/422/485. The SSD solution supports both DiskOnChip®2000 and CFC.

PCM-9550 also provides some features for POS applications; two to note, COM port with +5 V/ +12 V select by jumpers and digital I/O for a cash drawer with isolated digital output.

SBC with EBX Form Factor, PC/104-Plus and Pentium® Processor Available Now

With this board and its EBX form factor and PC/104-Plus interface, system engineers can develop their own products or buy them off the shelf for this board. Up to four EIDE devices can be supported as well as two FDDs.

True multimedia SBC

The PCM-9550 F/M supports 3D audio and complies with the AC97 standard. The PCM-9550 FM combines audio, video-in and TV-out, and network functions on a single board computer the same size as the EBX form factor standard. It provides video capture that supports RCA connectors and S-Video connectors via optional cable kit, and video-out function which supports NTSC and PAL formats.

Features

- Embedded low power Pentium® MMX™ 266 MHz processor
- Applied EBX form factor standard and supports PC/104+ bus
- Fanless operation at 60°C.
- Supports wake-up on LAN, Modem
- Supports Video-in and TV-out (PCM-9550 FM only)
- Supports dual display function under Windows 98/ Windows2000 (LED chip 69030 only)
- Supports one mini PCI socket for optional 56k modem
- 4 COM ports share with 1 IRQ
- COM port with +5 V/ +12 V power select, 8 digital I/O channels, fanless feature for POS application environment

Specifications

- **CPU:** Embedded Intel® Low Power Pentium® MMX™ 266 MHz processor
- **BIOS:** Award 256 KB Flash memory
- **System memory:** One DIMM socket accepts 32 MB up to 256 MB SDRAM
- **2nd cache memory:** 512 KB SRAM
- **Enhanced IDE interface:** Two channels supports up to four IDE devices. BIOS auto-detect, PIO Mode 3 or Mode 4, UDMA/33 transfer
- **FDD interface:** Supports up to two FDDs
- **Serial ports:** Four serial RS-232 ports, COM1, 3, 4: RS-232, COM2: RS-232/422/485
- **Com port share IRQ:** 4 com ports can share with one IRQ
- **Parallel port:** Two parallel ports, supports SPP/EPP/ECP mode
- **Digital I/O:** 8 TTL digital inputs and 8 TTL outputs, or 6 TTL outputs and 2 open collectors for isolated control
- **Infrared port:** Shared with COM2. Transfer rates up to 4 Mbps
- **Keyboard/mouse connector:** Supports standard PC/AT keyboard and a PS/2 mouse
- **Power management:** Supports power saving modes including Normal/Standby/Suspend modes. APM 1.2 compliant
- **Watchdog timer:** 62 level timer intervals
- **USB:** Two universal serial bus ports, compliant USB 1.0
- **Expansion:**
 - PC/104 plus connector for ISA and PCI control module
 - Mini PCI socket for Tyte III mini PCI 56k modem

Solid State Disk

- Supports one 50-pin socket for CompactFlash card
- Supports M-Systems DiskOnChip®2000

VGA/LCD Interface

- **Chipset:** 69000 2MB SDRAM on chip, optional 69030 4MB memory on chip
- **Interface:** AGP interface, 64-bit engine
- **Display mode:** Flat panel displays up to 800 x 600 @ 24 bpp, 1024 x 768 @ 166 bpp. CRT monitors display up to 800 x 600 @ 24 bpp, 1024 x 768 @ 16 bpp
- **Dual display:** Supports CRT and LCD display under Windows 98/ Windows 2000 (69030 only)

Ethernet Interface

- **Chipset:** RTL 8139
- **Ethernet interface:** PCI 10/100 Mbps Ethernet. IEEE 802.3 U protocol compatible
- **I/O address switchless setting**
- **Built-in boot ROM**

Audio Function

- **Chipset:** ES 1989
- **Audio controller:** AC97 ver. 2.0 compliant interface
- **Audio interface:** Microphone in, Line in, CD audio in, line out, Speaker L, Speaker R
- **Multi stream, Direct Sound, and Direct Sound 3D Acceleration**

Mechanical and Environmental

- **Dimensions (L x W):** EBX form factor, 203 x 146 mm (8" x 5.75")
- **Power supply voltage:** +5 V $\pm 5\%$
- **Power requirements:** Max. 4 A @ +5 V, typical 2.8 A @ +5 V (with 64 MB DRAM, Pentium® 266 CPU)
- **Operating temperature:** 0 ~ 60° C
- **Weight:** 0.7 kg (weight of total package)

Ordering Information:

□ PCM-9550F-F0A1:

EBX SBC with Pentium® MMX™ 266 CPU, Audio, VGA/LCD, Ethernet, and DIO

□ PCM-9550F-F4A1:

Same as PCM-9550F-F0A1, but with 4MB VGA

□ PCM-9550FM-F0A1:

Same as PCM-9550F-F0A1, but with video in and video out

□ PCM-9550FM-F4A1:

Same as PCM-9550F-F0A1, but with video in and video out and 4 MB VGA

□ PCM-10586-5000:

PCM-9550F wiring kit

□ 1703100260:

USB cable for PCM-9574/ PCM-9550F

□ 96890000198:

Type III mini PCI 56k Modem card (international ver.)

□ PCM-200-00A1:

PC/104-Plus to PCI slot module

□ 1703200100:

ATX power cable for PCM-9550F/M